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MAMMOTH FOUND IN PEORIAN LOESS NEAR
BELLEVIEW, ILLINOIS

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MAMMOTH FOUND IN PEORIAN LOESS NEAR BELLEVIEW, ILLINOIS.¹

H. B. WILLMAN.

ABSTRACT. Part of the skeleton of a mammoth was exposed in making a road-cut near Belleview, Calhoun County, Illinois. The bones were distributed through a vertical interval of at least five feet of Peorian loess. Only the skull, teeth, and tusks were removed, so much of the remainder of the skeleton may still be present.

PART of the skeleton of a mammoth which died during the dust storms in the Peorian sub-stage of the Glacial period was recently exposed in making a road-cut in a small valley tributary to Mississippi Valley about 50 miles southeast of Quincy, Illinois. The site (Fig. 1) is near the village of Belle-

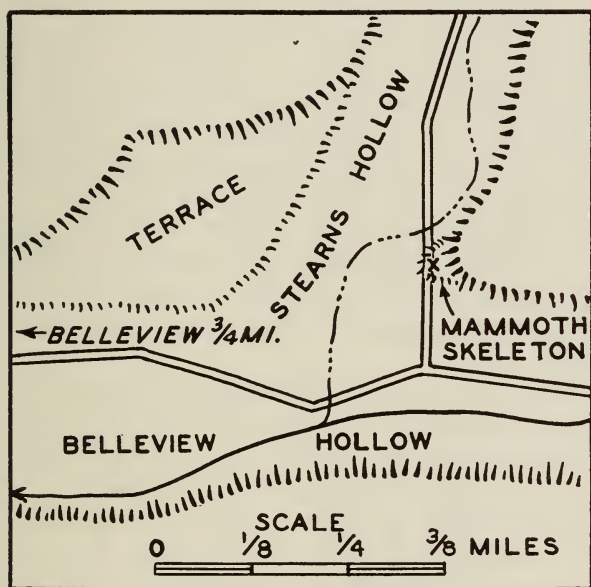


Fig. 1. Location of mammoth skeleton.

view, Calhoun County, Illinois, on the east side of Stearns Hollow at its junction with Belleview Hollow, at the center of the east line of the NE. 1/4 SW. 1/4 SW. 1/4 sec. 16, T. 8 S., R. 3 W. (see Nebo quadrangle topographic map). The exposure is the first road-cut along the north-south road leading up

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Stearns Hollow, about one-eighth mile north of its junction with the east-west road along Belleview Hollow. A mammoth tusk was found April 18, 1940, by a group of W. P. A. workers under the supervision of Mr. H. A. Wineland, who stopped work at this site until it was examined April 20 by Prof. L. A. Adams, Curator of the Natural History Museum of the University of Illinois, and the writer. Numerous bones and four teeth were found and were identified by Professor Adams as belonging to *Elephas primigenius boreus* Hay.

The road-cut is in the nose of a small terrace remnant, the surface of which is about 20 feet above the present flood-plain. Many large remnants of the same terrace occur nearby and all of them are at the same level as the Brussels terrace,² which consists of sediments of Illinoian glacial age overlain by late Sangamon and Peorian loess. The road-cut (Fig. 2) exposes about 15 feet of loess, which here is a uniform, nonbedded silt. All except the lower two feet is mottled buff and gray in color and is believed to be of Peorian age. The name Peorian is applied to the widespread Wisconsin loess which accumulated outside the area covered by the Wisconsin glaciers. The lower two feet is reddish-brown and probably of late Sangamon age, that is, late in the interglacial age between the Illinoian and Wisconsin glacial ages. The upper two and one-half to three feet of the loess is noncalcareous and the remainder is highly calcareous.

The mammoth bones were found entirely in the Peorian loess and were most abundant in a zone five to six feet below the top of the terrace but were found as low as eight feet below the top. No bones were seen in the highest three feet of loess, but other bones may occur lower in the loess, as no attempt was made to excavate below the lowest bones found. The loess was tightly packed around the bones, penetrating even the small reentrants.

The distribution of the bones indicated that the skeleton was largely disjointed. The jaws and the skull were found about three feet apart. One of the tusks extended across the interval between the two jaws and lay slightly above them. The other tusk, excavated about ten years ago by a farmer who struck it while plowing deep, is reported to have been about three feet higher and six to eight feet away. One of the leg bones was found about 15 feet laterally from the jaws.

² Rubey, W. W.: Unpublished report on the Hardin and Brussels quadrangles, south of the Belleview area.

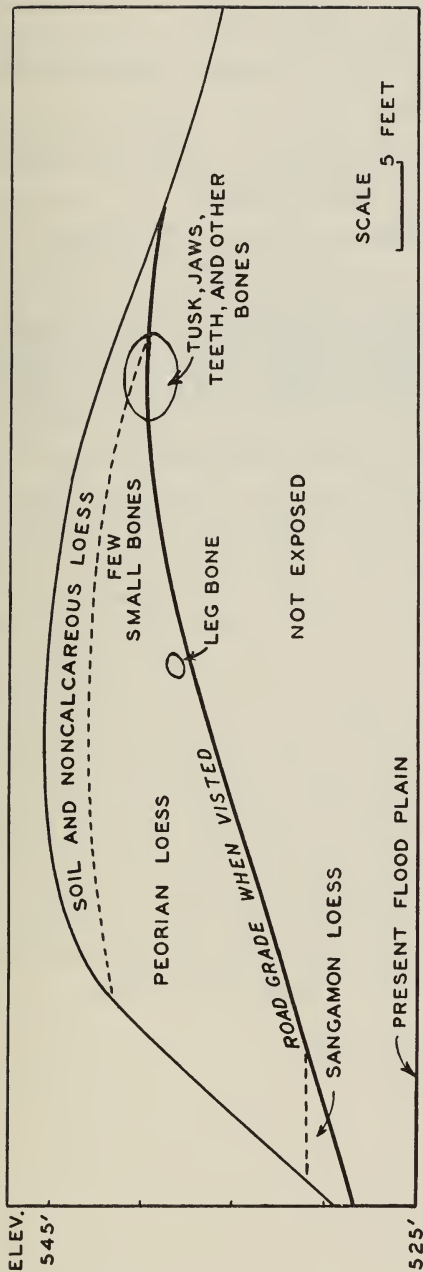


Fig. 2. Diagrammatic cross section of terrace.

Numerous rib bones and fragments of vertebrae were found near the jaws. The bones were no farther separated than might be expected from the collapse of the skeleton while being covered by the loess.

Not enough of the bones were exposed to determine exactly in what position the animal lay. However, a considerable part of the skeleton may still be present in the unexcavated portion of the terrace. Many rib bones and vertebrae were found in a small excavation made in the terrace extending from the road cut eastward into the adjacent field and were still abundant when digging was discontinued. As many of the bones were found near the eroded slope of the terrace, some may have occurred in the portion of the terrace now eroded.

Many of the bones were almost as soft as the loess, although a few were relatively solid and could be removed without breaking. The four teeth were in an excellent state of preservation. The tusk, which was about four feet long and about eight inches thick at its larger end, extended about one foot into the non-calcareous zone, showing that the carbonates were leached from about one foot of loess without completely destroying the tusk. The part of the tusk in the noncalcareous zone, the smaller end, was badly fractured, and consisted of thin slabby pieces which decreased in size from large fragments at the margin of the calcareous zone to pieces less than one-half inch in diameter at the broken end nearer the ground surface, but only a few fragments at the broken end were slightly dislodged from their original position. The part of the tusk in the calcareous zone was apparently solid but all except a small section of it completely disintegrated when an attempt was made to collect it, probably because it had been exposed to the air for short intervals on the two days preceding.

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